

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1432304

Luminaire Tested: EHBR1-18-UNV-TASM-L830-UPL36

Issue Date: 3/20/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1432304  
REPORT IS A COMBINATION OF REPORTS P1431681 AND P1431635  
Test Lab: INNOVATION CENTER  
Issue Date: 3/20/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: EHBR1-18-UNV-TASM-L830-UPL36  
Description: Elevate Round Highbay at, 18000 lumens, 3000K 80CRI LEDs with TASM lens  
Light Source: -  
Ballast/Driver: -

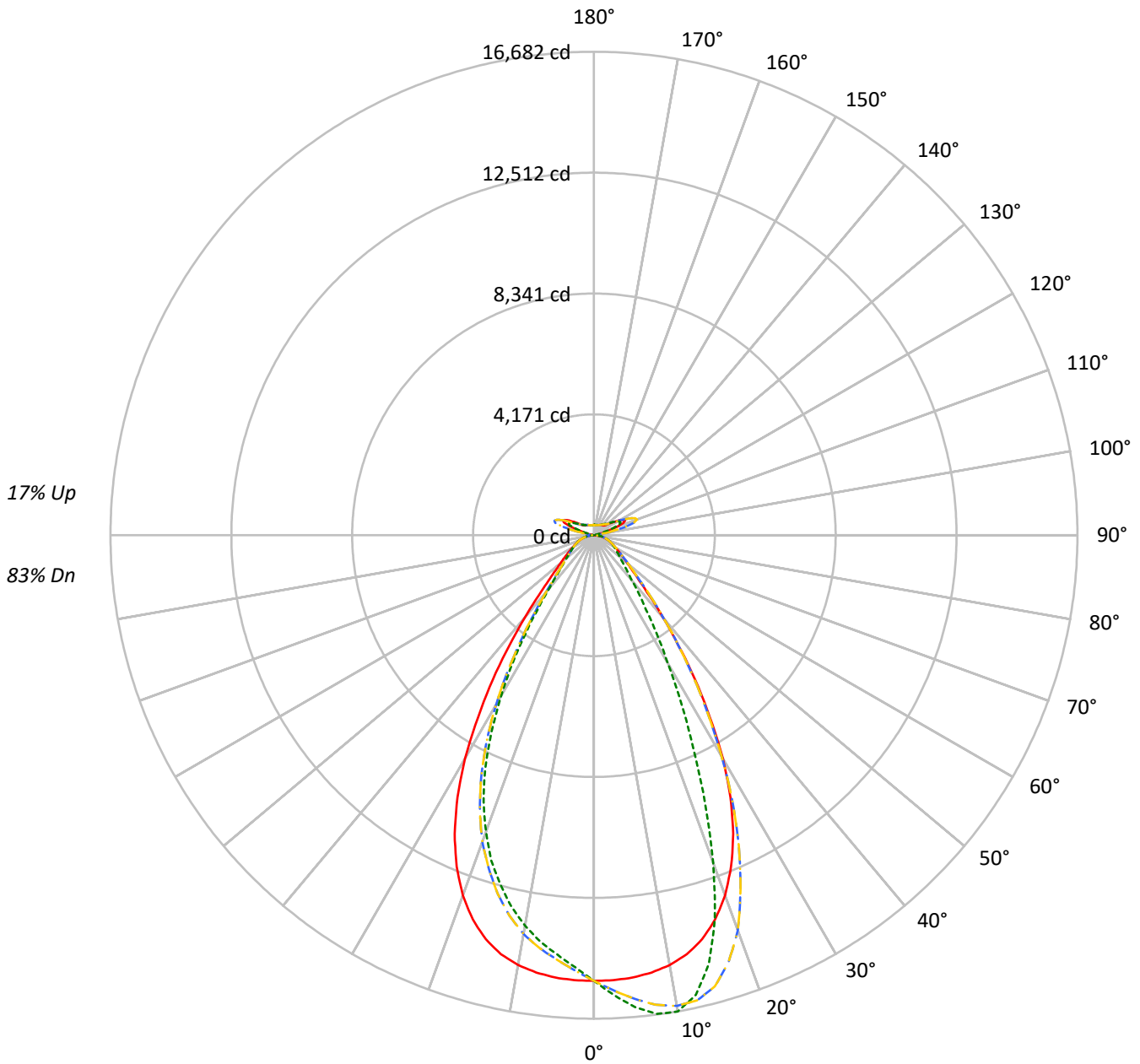
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20639.4 lumens  
Efficiency: N/A  
Efficacy: 167.7 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9  
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 123.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P1432304  
CATALOG NUMBER: EHBR1-18-UNV-TASM-L830-UPL36

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - · 90°-270°    - · - · 135°-315°



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	87	87	87	83
1	108	104	101	98	103	100	98	95	93	91	89	87	85	83	81	79	78	78	78	78	75
2	101	95	89	85	97	91	87	83	85	82	79	80	77	74	75	72	71	71	71	71	68
3	94	86	80	75	91	84	78	74	78	74	70	74	70	67	69	66	64	64	64	64	62
4	88	79	72	67	85	77	71	66	72	67	63	68	64	61	65	61	59	59	59	59	56
5	83	73	66	61	80	71	65	60	67	62	58	64	59	56	60	57	54	54	54	54	52
6	78	67	60	55	75	66	59	55	62	57	53	59	55	51	56	53	50	50	50	50	48
7	73	63	56	51	71	61	55	50	58	53	49	56	51	47	53	49	46	46	46	46	44
8	69	58	52	47	67	57	51	46	55	49	45	52	47	44	50	46	43	43	43	43	41
9	65	55	48	43	63	53	47	43	51	46	42	49	44	41	47	43	40	40	40	40	38
10	62	51	45	40	60	50	44	40	48	43	39	46	42	38	44	40	37	37	37	37	36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	72198	72198	72198	72198
5°	71759	76553	71759	68035
10°	70876	78518	70876	64389
15°	68784	72968	68784	59478
20°	64330	58510	64330	52978
25°	56937	40539	56937	44398
30°	46231	26373	46231	33219
35°	33158	17080	33158	22114
40°	21438	11773	21438	13947
45°	13602	9119	13602	9937
50°	10101	7749	10101	8277
55°	8247	7059	8247	7307
60°	7141	6725	7141	6765
65°	6510	6485	6510	6458
70°	6170	6354	6170	6272
75°	5769	6147	5769	5962
80°	5070	5803	5070	5425
85°	3279	4143	3279	3951

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 19123 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1461.8	7.1
10°-20°	3977.0	19.3
20°-30°	4664.2	22.6
30°-40°	3243.7	15.7
40°-50°	1611.9	7.8
50°-60°	964.1	4.7
60°-70°	678.6	3.3
70°-80°	437.1	2.1
80°-90°	144.9	0.7
90°-100°	91.6	0.4
100°-110°	602.2	2.9
110°-120°	1113.2	5.4
120°-130°	661.0	3.2
130°-140°	398.8	1.9
140°-150°	275.1	1.3
150°-160°	178.7	0.9
160°-170°	101.8	0.5
170°-180°	33.6	0.2
0°-30°	10103.1	49.0
0°-40°	13346.7	64.7
0°-60°	15922.8	77.1
0°-90°	17183.4	83.3
90°-120°	1806.9	8.8
90°-150°	3141.9	15.2
90°-180°	3456.0	16.7
0°-180°	20639.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	15374	15374	15374	15374	15374	
5°	15322	16345	15322	14526	15322	1454
15°	14430	15308	14430	12478	14430	4033
25°	11370	8096	11370	8866	11370	5148
35°	6086	3135	6086	4059	6086	3799
45°	2201	1475	2201	1608	2201	1801
55°	1114	954	1114	987	1114	1019
65°	680	677	680	674	680	682
75°	406	433	406	420	406	427
85°	113	142	113	136	113	125
90°	25	27	25	25	25	17
95°	48	44	48	42	48	52
105°	276	139	276	209	276	373
115°	1185	1010	1185	962	1185	1080
125°	758	792	758	694	758	698
135°	478	551	478	507	478	379
145°	431	450	431	419	431	270
155°	382	398	382	369	382	178
165°	356	366	356	349	356	102
175°	353	357	353	347	353	34
180°	352	352	352	352	352	



TEST NUMBER: P1432304  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L830-UPL36

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0
2.5°	15365.0	15563.7	15724.5	15830.7	15883.1	15830.7	15724.5	15563.7	15365.0	15167.6	15031.8
5°	15321.6	15719.4	16056.4	16276.9	16345.2	16276.9	16056.4	15719.4	15321.6	14945.7	14696.2
7.5°	15217.5	15837.3	16338.1	16595.5	16658.3	16595.5	16338.1	15837.3	15217.5	14685.3	14370.2
10°	15058.6	15911.7	16490.3	16674.7	16682.2	16674.7	16490.3	15911.7	15058.6	14341.7	13970.1
12.5°	14805.2	15885.2	16439.2	16378.7	16241.1	16378.7	16439.2	15885.2	14805.2	13921.9	13453.2
15°	14430.5	15728.0	16116.1	15623.4	15308.3	15623.4	16116.1	15728.0	14430.5	13355.1	12811.5
17.5°	13902.4	15434.0	15441.5	14466.8	13872.3	14466.8	15441.5	15434.0	13902.4	12662.1	12063.3
20°	13221.6	14962.3	14512.6	12729.9	12025.6	12729.9	14512.6	14962.3	13221.6	11842.8	11255.3
22.5°	12368.3	14326.4	13219.0	10982.5	10021.7	10982.5	13219.0	14326.4	12368.3	10890.0	10278.5
25°	11370.3	13547.2	11827.5	9078.7	8095.7	9078.7	11827.5	13547.2	11370.3	9754.7	9201.8
27.5°	10196.4	12559.5	10345.8	7418.7	6511.8	7418.7	10345.8	12559.5	10196.4	8582.6	8017.9
30°	8892.5	11293.3	8803.7	5908.1	5072.9	5908.1	8803.7	11293.3	8892.5	7265.7	6760.0
32.5°	7432.6	10052.3	7322.7	4733.9	4026.5	4733.9	7322.7	10052.3	7432.6	6009.0	5480.6
35°	6085.7	8499.5	5987.4	3719.8	3134.8	3719.8	5987.4	8499.5	6085.7	4822.7	4303.8
37.5°	4776.0	7032.4	4772.9	2995.3	2542.7	2995.3	4772.9	7032.4	4776.0	3749.5	3328.2
40°	3715.7	5498.8	3739.6	2391.0	2040.5	2391.0	3739.6	5498.8	3715.7	2852.8	2583.3
42.5°	2815.4	4204.6	2939.4	1962.4	1733.2	1962.4	2939.4	4204.6	2815.4	2247.7	2046.0
45°	2200.8	3094.1	2295.3	1655.6	1475.4	1655.6	2295.3	3094.1	2200.8	1810.2	1674.6
47.5°	1792.3	2391.3	1860.3	1420.1	1293.8	1420.1	1860.3	2391.3	1792.3	1531.1	1429.6
50°	1505.4	1834.9	1544.6	1239.6	1154.9	1239.6	1544.6	1834.9	1505.4	1311.1	1243.4
52.5°	1293.2	1496.5	1315.4	1104.8	1047.6	1104.8	1315.4	1496.5	1293.2	1147.1	1105.0
55°	1114.5	1258.1	1143.9	993.5	953.9	993.5	1143.9	1258.1	1114.5	1020.8	989.7
57.5°	978.8	1067.2	993.5	898.6	872.4	898.6	993.5	1067.2	978.8	908.4	891.7
60°	858.5	924.3	876.7	815.9	808.4	815.9	876.7	924.3	858.5	817.3	806.3
62.5°	765.9	807.4	775.2	741.5	734.8	741.5	775.2	807.4	765.9	734.3	736.3
65°	679.5	718.1	692.8	674.6	676.9	674.6	692.8	718.1	679.5	664.8	668.0
67.5°	612.6	632.7	621.8	611.5	614.0	611.5	621.8	632.7	612.6	598.2	603.1
70°	541.4	563.1	551.8	553.2	557.5	553.2	551.8	563.1	541.4	537.1	540.9
72.5°	473.3	490.1	486.3	489.8	494.4	489.8	486.3	490.1	473.3	472.8	473.0
75°	406.4	419.2	420.9	425.8	433.0	425.8	420.9	419.2	406.4	402.1	407.4
77.5°	333.6	348.0	353.4	360.1	370.7	360.1	353.4	348.0	333.6	336.5	339.0
80°	266.7	273.3	285.4	290.3	305.3	290.3	285.4	273.3	266.7	261.8	265.6
82.5°	195.2	201.2	211.6	220.8	229.5	220.8	211.6	201.2	195.2	192.9	193.1
85°	112.7	122.0	128.9	139.9	142.4	139.9	128.9	122.0	112.7	115.3	112.7
87.5°	39.5	42.3	48.4	52.7	53.0	52.7	48.4	42.3	39.5	40.4	36.6
90°	25.2	42.7	73.6	40.0	27.3	40.0	73.6	42.7	25.2	44.3	69.2
92.5°	32.9	58.1	104.3	53.4	36.8	53.4	104.3	58.1	32.9	57.8	111.4
95°	48.4	71.5	133.0	59.2	44.5	59.2	133.0	71.5	48.4	76.9	155.5
97.5°	75.3	88.7	150.2	63.0	54.0	63.0	150.2	88.7	75.3	94.1	178.4
100°	100.2	100.2	274.8	72.6	61.7	72.6	274.8	100.2	100.2	115.5	278.1
102.5°	151.9	196.2	637.2	145.8	75.1	145.8	637.2	196.2	151.9	217.0	590.4
105°	276.4	449.2	1122.0	377.6	138.6	377.6	1122.0	449.2	276.4	454.7	1052.1
107.5°	523.6	838.1	1445.7	745.4	324.5	745.4	1445.7	838.1	523.6	805.3	1387.7
110°	837.8	1171.4	1578.0	1021.4	657.9	1021.4	1578.0	1171.4	837.8	1106.1	1454.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1090.7	1305.6	1541.5	1132.5	910.8	1132.5	1541.5	1305.6	1090.7	1221.0	1393.4
115°	1184.9	1286.5	1376.8	1128.6	1010.4	1128.6	1376.8	1286.5	1184.9	1192.2	1244.0
117.5°	1144.7	1177.3	1189.0	1059.7	1016.1	1059.7	1189.0	1177.3	1144.7	1071.9	1056.2
120°	1033.6	1020.2	1001.5	958.2	958.7	958.2	1001.5	1020.2	1033.6	935.9	881.9
122.5°	894.0	865.2	846.3	854.9	880.1	854.9	846.3	865.2	894.0	796.2	755.7
125°	757.9	729.2	737.4	766.8	792.3	766.8	737.4	729.2	757.9	675.8	666.0
127.5°	643.2	629.8	658.9	692.0	713.7	692.0	658.9	629.8	643.2	591.5	602.8
130°	561.2	564.6	603.3	631.1	644.7	631.1	603.3	564.6	561.2	536.3	562.8
132.5°	509.8	524.7	561.6	585.3	593.3	585.3	561.6	524.7	509.8	502.4	534.7
135°	477.5	499.8	533.1	548.6	551.2	548.6	533.1	499.8	477.5	479.7	509.8
137.5°	458.6	481.0	506.2	518.3	514.7	518.3	506.2	481.0	458.6	464.6	487.4
140°	447.4	469.9	481.3	495.3	492.1	495.3	481.3	469.9	447.4	451.2	468.4
142.5°	436.2	456.7	462.5	472.6	469.0	472.6	462.5	456.7	436.2	440.1	451.5
145°	430.7	445.8	441.7	455.3	450.2	455.3	441.7	445.8	430.7	432.4	438.4
147.5°	421.1	432.4	426.6	438.4	433.2	438.4	426.6	432.4	421.1	421.1	423.3
150°	409.9	417.6	409.6	423.3	422.0	423.3	409.6	417.6	409.9	408.0	410.2
152.5°	394.9	402.5	394.9	410.5	408.9	410.5	394.9	402.5	394.9	392.9	395.2
155°	382.0	385.8	382.0	397.6	397.9	397.6	382.0	385.8	382.0	381.7	382.3
157.5°	373.0	375.2	373.3	387.0	387.3	387.0	373.3	375.2	373.0	373.0	373.3
160°	364.7	368.5	366.8	378.6	378.9	378.6	366.8	368.5	364.7	366.3	366.5
162.5°	361.4	361.4	360.1	371.8	372.3	371.8	360.1	361.4	361.4	361.4	363.3
165°	356.5	358.4	355.1	363.3	365.9	363.3	355.1	358.4	356.5	358.1	358.1
167.5°	355.1	353.2	353.8	360.4	363.0	360.4	353.8	353.2	355.1	356.8	356.8
170°	351.5	351.8	350.6	357.2	359.7	357.2	350.6	351.8	351.5	353.5	355.1
172.5°	352.5	352.5	349.5	354.2	358.6	354.2	349.5	352.5	352.5	354.1	355.9
175°	353.0	351.5	350.0	352.9	357.3	352.9	350.0	351.5	353.0	352.8	352.8
177.5°	351.2	351.7	352.3	355.0	361.4	355.0	352.3	351.7	351.2	352.8	352.8
180°	351.7	351.7	351.7	351.7	351.7	351.7	351.7	351.7	351.7	351.7	351.7



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	15374.0	15374.0	15374.0	15374.0	15374.0	15374.0
2.5°	14927.5	14917.7	14927.5	15031.8	15167.6	15365.0
5°	14580.6	14526.5	14580.6	14696.2	14945.7	15321.6
7.5°	14176.7	14145.3	14176.7	14370.2	14685.3	15217.5
10°	13751.5	13680.4	13751.5	13970.1	14341.7	15058.6
12.5°	13227.5	13133.1	13227.5	13453.2	13921.9	14805.2
15°	12560.9	12478.2	12560.9	12811.5	13355.1	14430.5
17.5°	11845.7	11770.7	11845.7	12063.3	12662.1	13902.4
20°	10947.4	10888.6	10947.4	11255.3	11842.8	13221.6
22.5°	10005.0	9949.9	10005.0	10278.5	10890.0	12368.3
25°	8896.2	8866.2	8896.2	9201.8	9754.7	11370.3
27.5°	7698.1	7647.1	7698.1	8017.9	8582.6	10196.4
30°	6474.1	6389.6	6474.1	6760.0	7265.7	8892.5
32.5°	5276.8	5216.0	5276.8	5480.6	6009.0	7432.6
35°	4119.6	4058.8	4119.6	4303.8	4822.7	6085.7
37.5°	3210.1	3102.6	3210.1	3328.2	3749.5	4776.0
40°	2434.6	2417.3	2434.6	2583.3	2852.8	3715.7
42.5°	1982.0	1935.0	1982.0	2046.0	2247.7	2815.4
45°	1626.2	1607.8	1626.2	1674.6	1810.2	2200.8
47.5°	1398.5	1406.6	1398.5	1429.6	1531.1	1792.3
50°	1228.7	1233.6	1228.7	1243.4	1311.1	1505.4
52.5°	1103.5	1099.2	1103.5	1105.0	1147.1	1293.2
55°	992.8	987.4	992.8	989.7	1020.8	1114.5
57.5°	896.0	900.0	896.0	891.7	908.4	978.8
60°	809.5	813.3	809.5	806.3	817.3	858.5
62.5°	736.5	738.9	736.5	736.3	734.3	765.9
65°	671.4	674.1	671.4	668.0	664.8	679.5
67.5°	609.1	609.1	609.1	603.1	598.2	612.6
70°	550.6	550.3	550.6	540.9	537.1	541.4
72.5°	480.3	487.2	480.3	473.0	472.8	473.3
75°	412.0	420.0	412.0	407.4	402.1	406.4
77.5°	342.7	355.2	342.7	339.0	336.5	333.6
80°	271.8	285.4	271.8	265.6	261.8	266.7
82.5°	200.9	211.0	200.9	193.1	192.9	195.2
85°	119.6	135.8	119.6	112.7	115.3	112.7
87.5°	38.3	49.0	38.3	36.6	40.4	39.5
90°	40.6	25.2	40.6	69.2	44.3	25.2
92.5°	61.6	36.7	61.6	111.4	57.8	32.9
95°	71.2	42.4	71.2	155.5	76.9	48.4
97.5°	78.9	54.2	78.9	178.4	94.1	75.3
100°	92.3	71.5	92.3	278.1	115.5	100.2
102.5°	195.7	121.3	195.7	590.4	217.0	151.9
105°	412.2	209.4	412.2	1052.1	454.7	276.4
107.5°	737.9	362.7	737.9	1387.7	805.3	523.6
110°	979.3	676.9	979.3	1454.8	1106.1	837.8



TEST NUMBER: P1432304

CATALOG NUMBER: EHBR1-18-UNV-TASM-L830-UPL36

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1052.1	914.5	1052.1	1393.4	1221.0	1090.7
115°	1011.9	962.4	1011.9	1244.0	1192.2	1184.9
117.5°	923.8	929.8	923.8	1056.2	1071.9	1144.7
120°	822.2	860.8	822.2	881.9	935.9	1033.6
122.5°	728.7	774.6	728.7	755.7	796.2	894.0
125°	648.1	694.4	648.1	666.0	675.8	757.9
127.5°	592.6	623.6	592.6	602.8	591.5	643.2
130°	548.8	575.6	548.8	562.8	536.3	561.2
132.5°	518.5	535.7	518.5	534.7	502.4	509.8
135°	491.9	506.9	491.9	509.8	479.7	477.5
137.5°	469.2	482.3	469.2	487.4	464.6	458.6
140°	448.8	460.0	448.8	468.4	451.2	447.4
142.5°	428.0	435.7	428.0	451.5	440.1	436.2
145°	413.2	419.0	413.2	438.4	432.4	430.7
147.5°	400.3	404.2	400.3	423.3	421.1	421.1
150°	387.5	391.4	387.5	410.2	408.0	409.9
152.5°	374.4	378.5	374.4	395.2	392.9	394.9
155°	365.3	369.4	365.3	382.3	381.7	382.0
157.5°	360.3	362.7	360.3	373.3	373.0	373.0
160°	355.4	357.5	355.4	366.5	366.3	364.7
162.5°	350.1	352.4	350.1	363.3	361.4	361.4
165°	348.8	349.1	348.8	358.1	358.1	356.5
167.5°	347.1	349.1	347.1	356.8	356.8	355.1
170°	347.4	347.7	347.4	355.1	353.5	351.5
172.5°	348.0	348.3	348.0	355.9	354.1	352.5
175°	346.8	347.1	346.8	352.8	352.8	353.0
177.5°	348.9	349.2	348.9	352.8	352.8	351.2
180°	351.7	351.7	351.7	351.7	351.7	351.7



TEST NUMBER: P1432304  
 CATALOG NUMBER: EHBR1-18-UNV-TASM-L830-UPL36

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.71	15.69	15.34	16.31	17.02	14.03	15.01	14.66	15.63	16.34
	3H	16.25	17.12	16.90	17.76	18.51	15.87	16.74	16.52	17.38	18.13
	4H	16.88	17.70	17.55	18.35	19.11	16.65	17.46	17.31	18.11	18.88
	6H	17.36	18.11	18.04	18.77	19.55	17.28	18.04	17.96	18.70	19.47
	8H	17.51	18.22	18.20	18.90	19.68	17.50	18.22	18.20	18.89	19.67
	12H	17.58	18.26	18.27	18.93	19.73	17.63	18.31	18.32	18.98	19.78
4H	2H	15.11	15.93	15.78	16.58	17.34	14.59	15.41	15.26	16.06	16.82
	3H	16.90	17.58	17.58	18.27	19.05	16.64	17.32	17.32	18.01	18.79
	4H	17.68	18.29	18.37	18.98	19.79	17.55	18.16	18.24	18.85	19.67
	6H	18.29	18.81	19.00	19.53	20.36	18.32	18.84	19.03	19.56	20.38
	8H	18.48	18.97	19.20	19.69	20.52	18.59	19.08	19.31	19.79	20.62
	12H	18.58	19.02	19.32	19.76	20.59	18.75	19.18	19.49	19.92	20.76
8H	4H	17.92	18.41	18.64	19.13	19.96	17.82	18.32	18.54	19.03	19.86
	6H	18.66	19.06	19.41	19.82	20.66	18.73	19.13	19.48	19.88	20.72
	8H	18.93	19.29	19.70	20.05	20.90	19.08	19.44	19.85	20.20	21.05
	12H	19.10	19.41	19.86	20.16	21.07	19.32	19.64	20.09	20.38	21.30
12H	4H	17.93	18.36	18.66	19.10	19.94	17.83	18.27	18.57	19.00	19.84
	6H	18.71	19.06	19.47	19.82	20.67	18.77	19.13	19.54	19.89	20.74
	8H	19.02	19.33	19.78	20.08	20.99	19.17	19.48	19.93	20.23	21.15

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-2

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L830-N

Data in this report applies to families of products including EHBR-60-L830-N

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2506-472-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/05/2025  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Metalux  
 Catalog Number: **EHBR-60-L830-N**  
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 80CRI LEDs with N lens

**Spectral Parameters**

CCT (K): 2983  
 CIE u': 0.2516  
 CIE v': 0.5201  
 Duv: -0.0012  
 CIE x: 0.4364  
 CIE y: 0.4010  
 CIE z: 0.1626  
 Peak Wavelength (nm): 630  
 Dominant Wavelength (nm): 583  
 Purity: 51.34918  
 Rf: 81.2  
 Rg: 101.5

CRI (Ra):	83.4		
R1:	84.0	R9:	29.4
R2:	87.5	R10:	68.6
R3:	88.9	R11:	82.2
R4:	83.8	R12:	61.6
R5:	81.9	R13:	83.9
R6:	83.1	R14:	92.5
R7:	87.1	R15:	79.8
R8:	70.9		



**Test Conditions**

Stabilization Time: 38M  
 Operation Time: 1H 38M  
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-2

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2506-472-2

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



CCT = 2983K  
 CIE x = 0.4364  
 CIE y = 0.4010  
 Duv = -0.0012

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-2

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

REPORT NUMBER: SP1-2506-472-2

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.34**

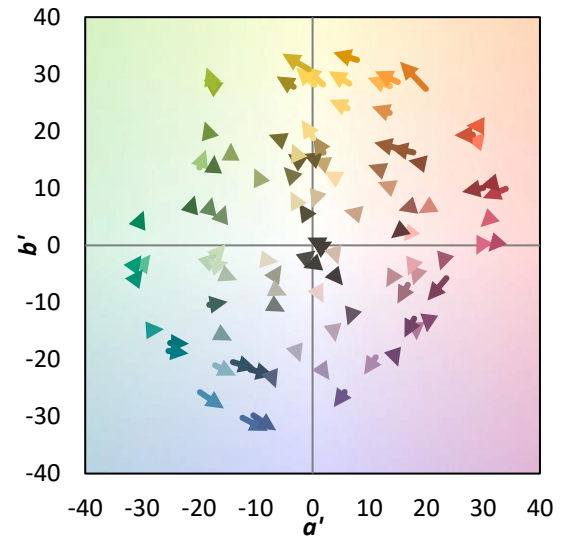
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	43	NR	620	294	NR	750	6	NR	880	0	NR
365	0	NR	495	59	NR	625	294	NR	755	5	NR	885	0	NR
370	0	NR	500	81	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	109	NR	635	637	NR	765	4	NR	895	0	NR
380	0	NR	510	135	NR	640	175	NR	770	3	NR	900	0	NR
385	0	NR	515	160	NR	645	171	NR	775	3	NR	905	0	NR
390	1	NR	520	180	NR	650	146	NR	780	2	NR	910	0	NR
395	1	NR	525	195	NR	655	119	NR	785	2	NR	915	0	NR
400	2	NR	530	207	NR	660	99	NR	790	2	NR	920	0	NR
405	3	NR	535	218	NR	665	82	NR	795	2	NR	925	0	NR
410	5	NR	540	227	NR	670	76	NR	800	1	NR	930	0	NR
415	10	NR	545	237	NR	675	61	NR	805	1	NR	935	0	NR
420	20	NR	550	247	NR	680	52	NR	810	1	NR	940	0	NR
425	35	NR	555	259	NR	685	44	NR	815	1	NR	945	0	NR
430	58	NR	560	271	NR	690	38	NR	820	1	NR	950	0	NR
435	90	NR	565	283	NR	695	33	NR	825	1	NR	955	0	NR
440	135	NR	570	293	NR	700	27	NR	830	1	NR	960	0	NR
445	204	NR	575	303	NR	705	24	NR	835	1	NR	965	0	NR
450	233	NR	580	310	NR	710	20	NR	840	0	NR	970	0	NR
455	153	NR	585	313	NR	715	17	NR	845	0	NR	975	0	NR
460	98	NR	590	314	NR	720	15	NR	850	0	NR	980	0	NR
465	76	NR	595	310	NR	725	13	NR	855	0	NR	985	0	NR
470	53	NR	600	307	NR	730	11	NR	860	0	NR	990	0	NR
475	39	NR	605	303	NR	735	9	NR	865	0	NR	995	0	NR
480	35	NR	610	331	NR	740	8	NR	870	0	NR	1000	0	NR
485	36	NR	615	353	NR	745	7	NR	875	0	NR			

**Summary**

$R_f = 81.2$   
 $R_g = 101.5$   
 CIE  $R_a = 83.4$   
 $R_9 = 29.4$



**Color Vector Graphics**



**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 71	CES51 = 89	CES76 = 65
CES02 = 63	CES27 = 89	CES52 = 89	CES77 = 82
CES03 = 31	CES28 = 86	CES53 = 80	CES78 = 67
CES04 = 70	CES29 = 68	CES54 = 92	CES79 = 89
CES05 = 50	CES30 = 77	CES55 = 90	CES80 = 85
CES06 = 51	CES31 = 70	CES56 = 81	CES81 = 75
CES07 = 43	CES32 = 64	CES57 = 79	CES82 = 93
CES08 = 41	CES33 = 74	CES58 = 81	CES83 = 89
CES09 = 29	CES34 = 76	CES59 = 92	CES84 = 91
CES10 = 76	CES35 = 87	CES60 = 96	CES85 = 81
CES11 = 59	CES36 = 99	CES61 = 91	CES86 = 74
CES12 = 65	CES37 = 81	CES62 = 93	CES87 = 83
CES13 = 44	CES38 = 83	CES63 = 79	CES88 = 86
CES14 = 74	CES39 = 94	CES64 = 81	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 78	CES90 = 85
CES16 = 48	CES41 = 88	CES66 = 76	CES91 = 87
CES17 = 50	CES42 = 80	CES67 = 74	CES92 = 73
CES18 = 57	CES43 = 75	CES68 = 79	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 67	CES45 = 83	CES70 = 72	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 70	CES96 = 86
CES22 = 79	CES47 = 79	CES72 = 90	CES97 = 85
CES23 = 92	CES48 = 78	CES73 = 65	CES98 = 83
CES24 = 91	CES49 = 79	CES74 = 94	CES99 = 82
CES25 = 72	CES50 = 88	CES75 = 70	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)